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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/955,343 | 09/18/2001 | Yuxiang Zhou | ART-00104.P.2 | 1433 |

24232 7590 02/24/2004

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EXAMINER

CHIN, CHRISTOPHER L

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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1641

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,343

Applicant(s)

ZHOU ET AL.

Examiner

Chris Chin

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1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-66 is/are pending in the application.
- 4a) Of the above claim(s) 63-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 41-66 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/399,299.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

Applicant's election without traverse of Group I – claims 41-62 in Paper No. 5 is acknowledged.

Priority

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification of in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

The parent application 09/399,299 must be recited in the first line of the specification along with its updated status and its relationship to the instant application.

Claim Rejections - 35 USC § 112

Claims 41-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 is vague and indefinite. Line 7 of the claim is not clear as to how the ligand molecules are being modified to make them positionable by magnetic fields. Line 16 of the claim is not clear as to how the target molecules are being modified to make them positionable by magnetic fields. The body of the claim is also inconsistent with the

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preamble of the claim. The preamble recites a method for directing reactions between ligand and target molecules but the body of the claim, specifically the last part of the claim, is directed to "allowing a reaction" between the target molecules and ligand molecules, not directing a reaction as recited in the preamble.

Claims 49 and 54 are vague. These claims recite using "biological affinity" to link the ligand molecule (claim 49) or target molecule (claim 54) to magnetic material. However, it is not clear as to how the ligand or target molecules can have biological affinity for a non-biological magnetic material.

Claims 50 and 55 are vague. While these claims define "biological affinity" as antibody-antigen affinity, lectin-hapten affinity, or receptor-ligand affinity, there is no antibody, antigen, lectin, hapten, receptor, or ligand on the magnetic material to provide for the "biological affinity" to take place.

Claim 56 is vague because it is not clear as to when the recited separation step occurs relative to the other method steps recited in claim 41.

Claim 59 is vague because the recitation of "the unit" lacks antecedent support.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Chin whose telephone number is (571) 272-0815. The examiner can normally be reached on Monday-Thursday from 10:30 am to 7:30 pm and on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached at (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cchin/Feb. 22, 2004



CHRISTOPHER L. CHIN
PRIMARY EXAMINER
GROUP 1800 /64/